



THE WORLDWIDE LEADER IN PHARMACEUTICAL SERVICES



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Data Review

To see or not to see ...

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Estelle Tiemtore, Quintiles, Strasbourg, France
Damian Green, Quintiles, Strasbourg, France

Outlines

Introduction

Section 1 : Overview of capacities

- ▶ **Dynamic data review process**
- ▶ **Dynamic review tools facilities**
- ▶ **Dynamic tools outputs displays**

Section 2 : Controlling data access

- ▶ **Regulatory guidance**
- ▶ **Unintentional unblinding**
- ▶ **Who needs access to what ?**

Conclusion

Introduction

Let's describe
clinical data review ...

Data review : change over time

- Hardcopy outputs (TLFs + PP)
- Spreadsheets (sort, filter, summaries, graphs)
- New tools (dynamic data review tools)



Dynamic data review process 1/2

Goal = safety review (AEs)

Easy
&
Targeted
review



**AEs by
SOC/Pref
term**

SMQ
AEs + Medical condition

Medical
history

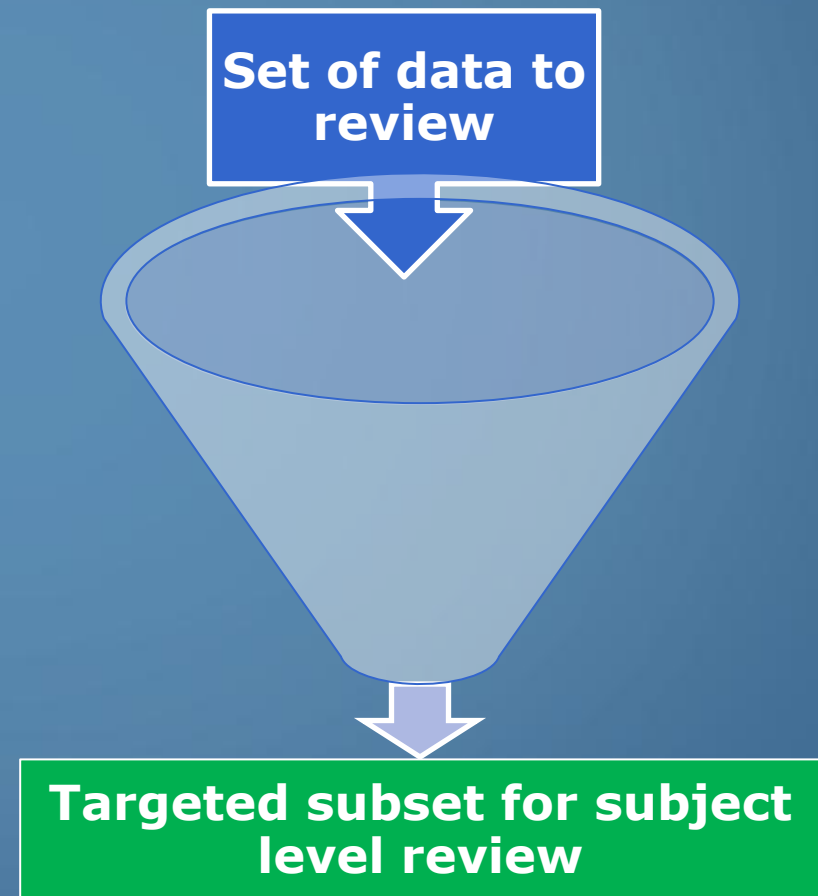
Vitals signs

Laboratory
data

Dynamic data review process 2/2

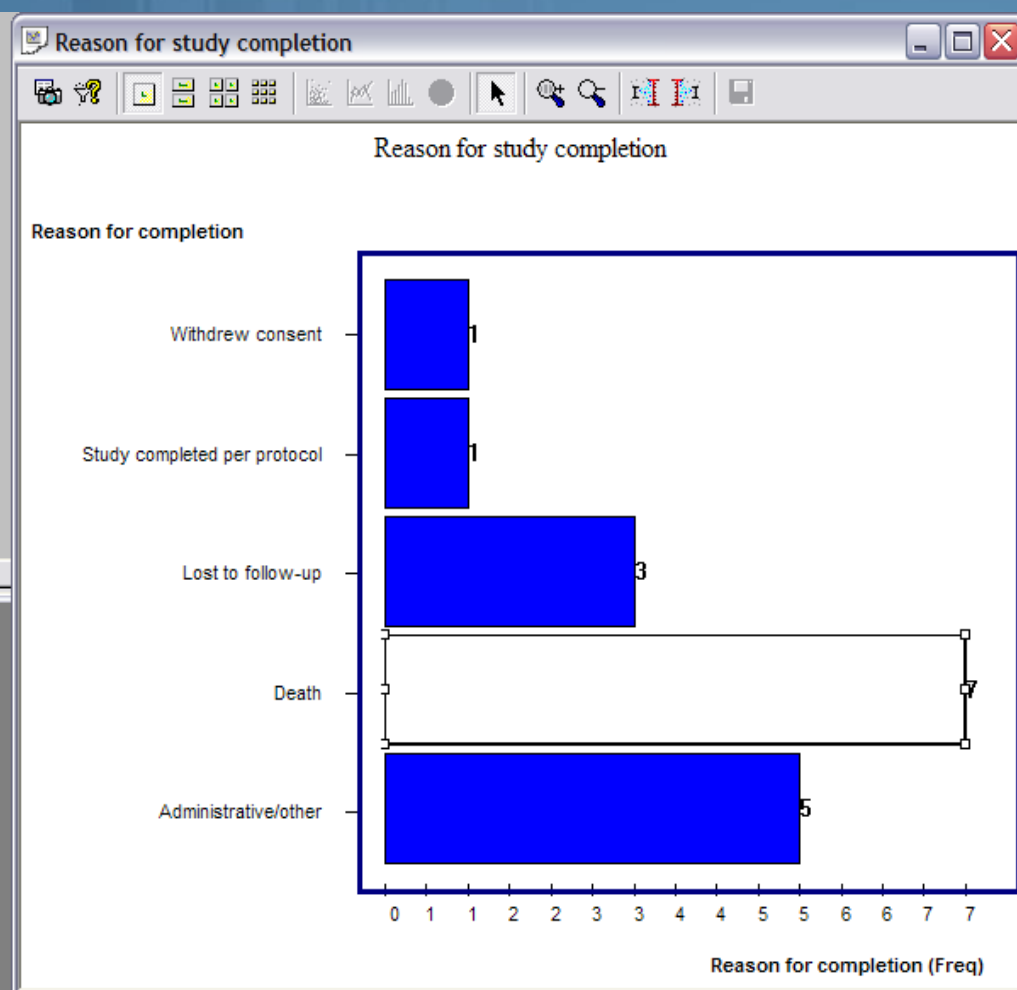
Get a quick overview of data

Easy access to individual data



Dynamic review tools facilities 1/2

Drill-down to individual level data (in point & click environment)



Demography

	A	B	C	D	E	F
1						
2	Patient	Site	Sex	Year of birth	Weight	Height
11	B6	XDUMMY1			.	.
24	M2	XDUMMY1	Female		29	129
30	M5	XDUMMY1			.	.
35	M8	XDUMMY1			.	.
37	R1	XDUMMY1	Male	1943	81	160

Missing first dose list

	A	B	C
1			
2	Patient	Site	Country
9	B6	XDUMMY1	USA
25	M5	XDUMMY1	USA
28	M8	XDUMMY1	USA

Dynamic review tools facilities 2/2

Automatically linked data (dynamic update of displays)

The screenshot displays three windows from a clinical trial data review application, illustrating dynamic data linking.

Data Browser (36 Cases Selected):

	Study	PT	SEX
1		A1	Male
2		B1	Female
3		B10	
4		B2	Male
5		B24	
6		B3	
7		B4	
8		B5	
9		B6	
10		B7	
11		B70	Male
12		B8	
13		B9	
14		M1	
15		M10	
16		M11	
17		M12	

Demography (Table 1):

	A	B	C	D	E	F
1	Patient	Site	Sex	Year of birth	Weight	Height
2	A1	XDUMMY1	Male	1974	80	171
3	B1	XDUMMY1	Female	1988	30	130
4	B10	XDUMMY1			.	.
5	B2	XDUMMY1	Male	1974	150	200
6	B24	XDUMMY1			.	.
7	B3	XDUMMY1			50	170
8	B4	XDUMMY1			.	.
9	B5	XDUMMY1			.	.
10	B6	XDUMMY1			.	.
11	B7	XD			.	.
12	B70	XD			.	.
13	B8	XD			.	.
14	B9	XD			.	.

Missing first dose list (Table 1):

	A	B	C
1	Patient	Site	Country
2	B10	XDUMMY1	USA
3	B2	XDUMMY1	USA
4	B24	XDUMMY1	USA
5	B3	XDUMMY1	USA
6	B4	XDUMMY1	USA
7	B5	XDUMMY1	USA
8	B6	XDUMMY1	USA
9	B7	XDUMMY1	USA
10	B70	XDUMMY1	USA
11	B8	XDUMMY1	USA
12	B9	XDUMMY1	USA

Custom DCMs:

Define Custom Panel

DCM/Question Groups:

- Study administration
- Cardiac events
- Congestive heart failure
- Concomitant medication
- Completion
- Concomitant treatment
- Condition risk for CHF
- Informed consent
- Country
- Demography

Dynamic tools displays 1/5

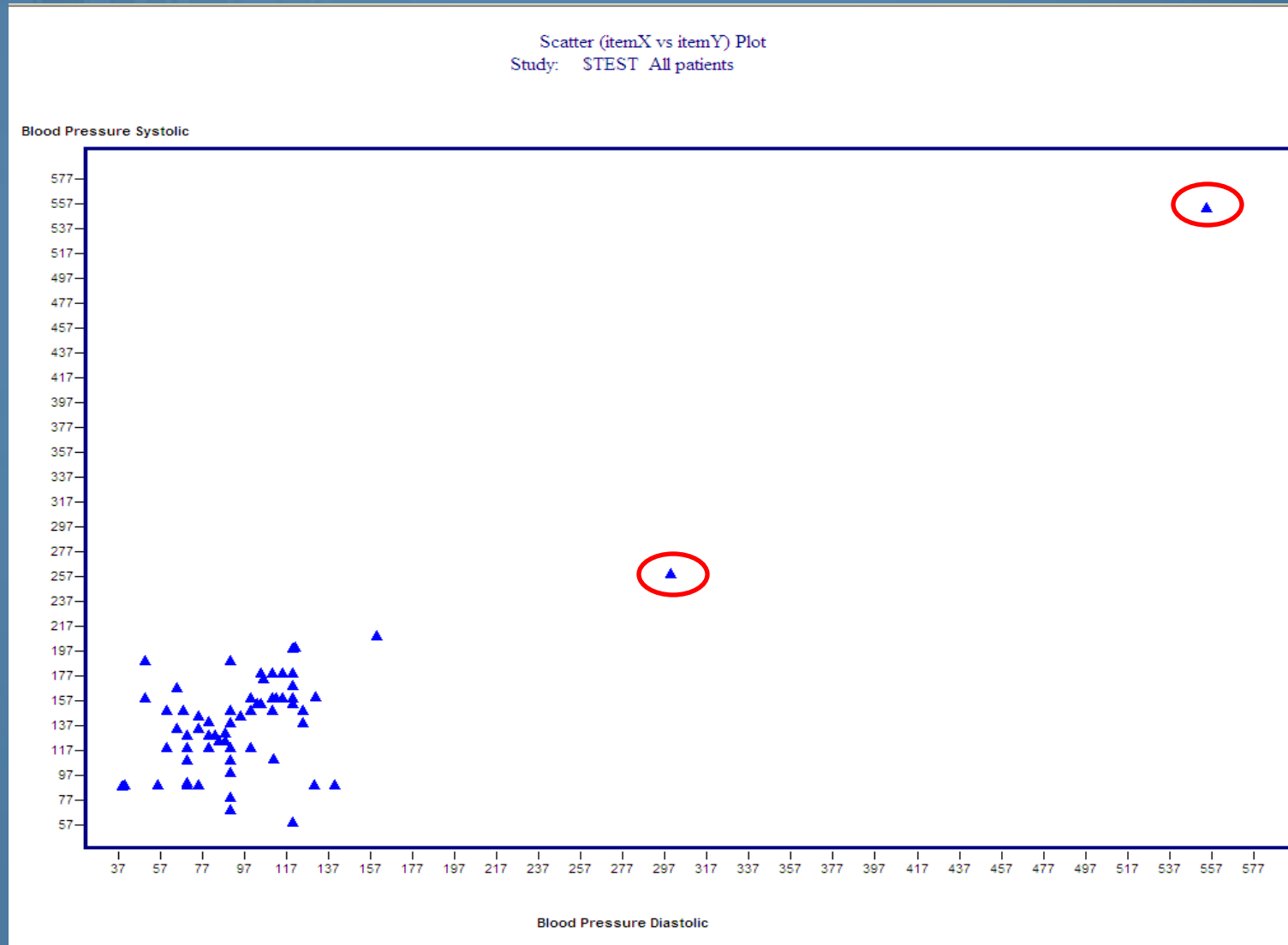
Datasets

Displays source accessible by click

Common displays

- Summarized outputs (tables, graphs)
- Detailed outputs (listings, profiles, reports)

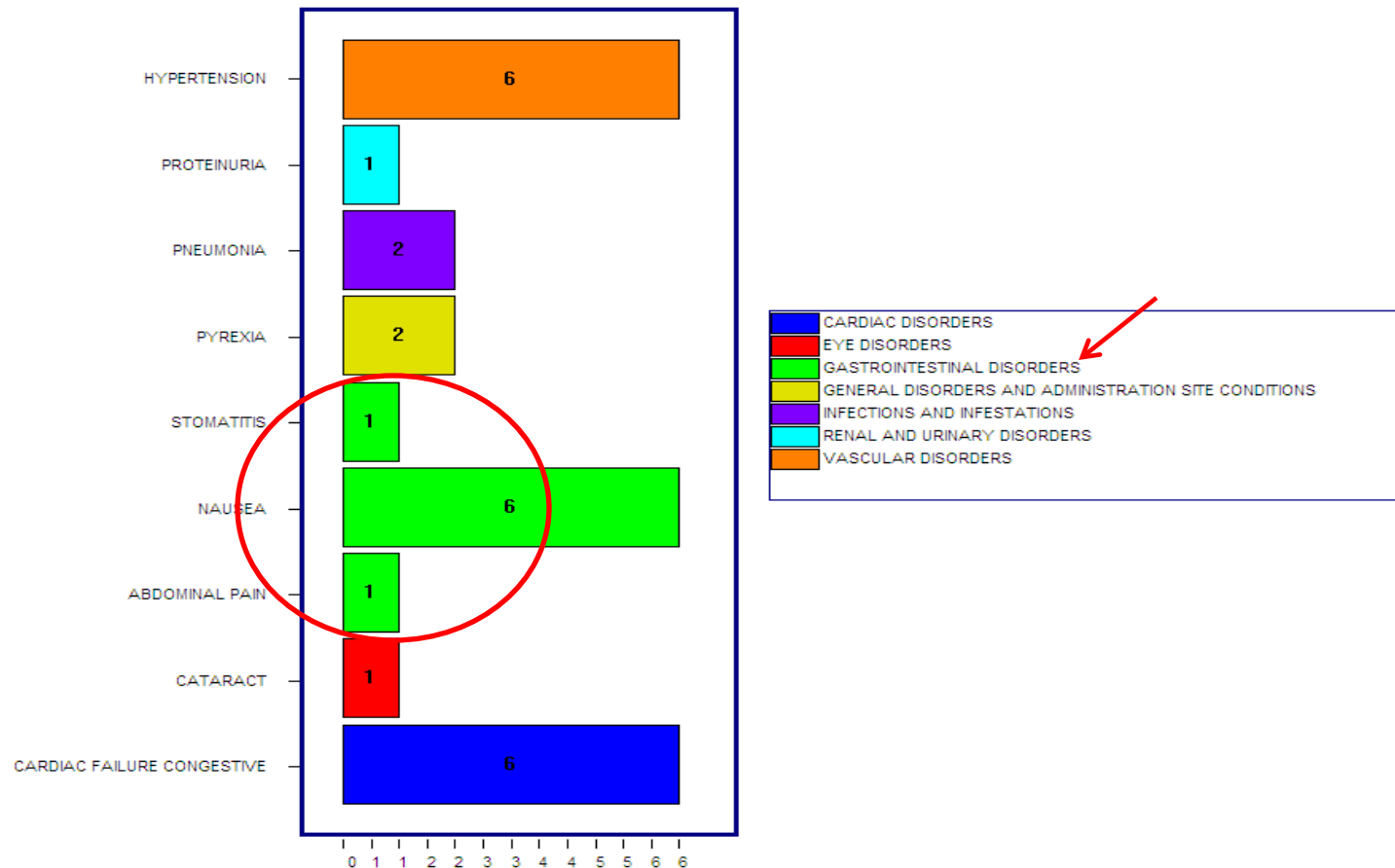
Dynamic tools displays 2/5



Dynamic tools displays 3/5

2D BarChart Frequency Distribution
Study: STEST Filter: AE Preferred Term present AND AE Super Class present

Adverse event: preferred term



Dynamic tools displays 4/5

A	B	C	D	E	F	G	H
No. Cases							
Percent							
Row Percent							
Col Percent							
Adverse event: super class term	Adverse event: preferred term	(missing)	CTCAE grade 1	CTCAE grade 2	CTCAE grade 3	CTCAE grade 4	Total
CARDIAC DISORDERS	CARDIAC FAILURE CONGESTIVE	3		1	1	1	6,00
		0,41		0,14	0,14	0,14	0,83
		50,00		16,67	16,67	16,67	
		23,08		14,29	50,00	100,00	
EYE DISORDERS	CATARACT			1			1,00
				0,14			0,14
				100,00			
				14,29			
GASTROINTESTINAL DISORDERS	ABDOMINAL PAIN	1					1,00
		0,14					0,14
		100,00					
		7,69					
	NAUSEA	1	3	2			6,00
		0,14	0,41	0,28			0,83
		16,67	50,00	33,33			
		7,69	75,00	28,57			
	STOMATITIS	1					1,00
		0,14					0,14
		100,00					
		7,69					
GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS	PYREXIA			2	1		3,00
				0,28	0,14		0,41
				66,67	33,33		
				28,57	50,00		



5/5

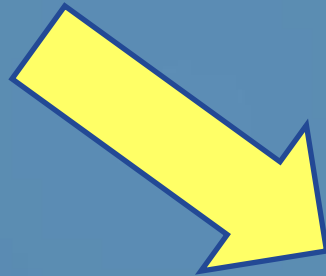
Dynamic review tools

Special advantages

- Easy Subgroup/individual selection
gain in speed
- Several displays in the same view
comparison & review enhanced
- Outputs version control
traceability

Controlling Data Access

Yesterday



Today
24/7



Regulatory guidance

Blinding or masking is intended to limit the occurrence of conscious and unconscious bias in the conduct and interpretation of a clinical trial...
(ICH E9)

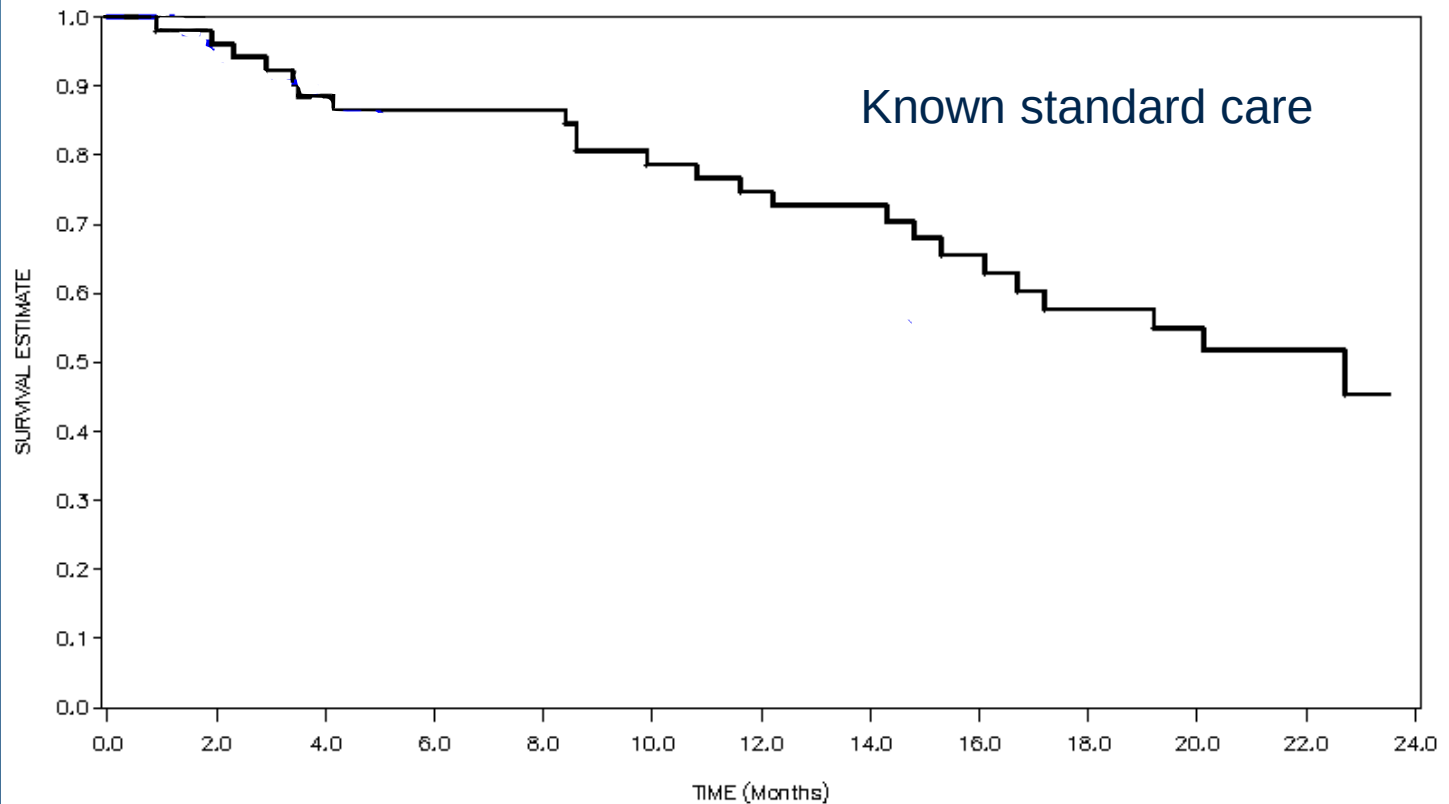
FDA guidance for the Establishment and Operation of Clinical Trial Data Monitoring Committees states
"Even aggregate data on safety and efficacy may be informative; these data ...are best limited to those who cannot otherwise carry out their trial management responsibilities."

Unintentional unblinding ^{1/3}

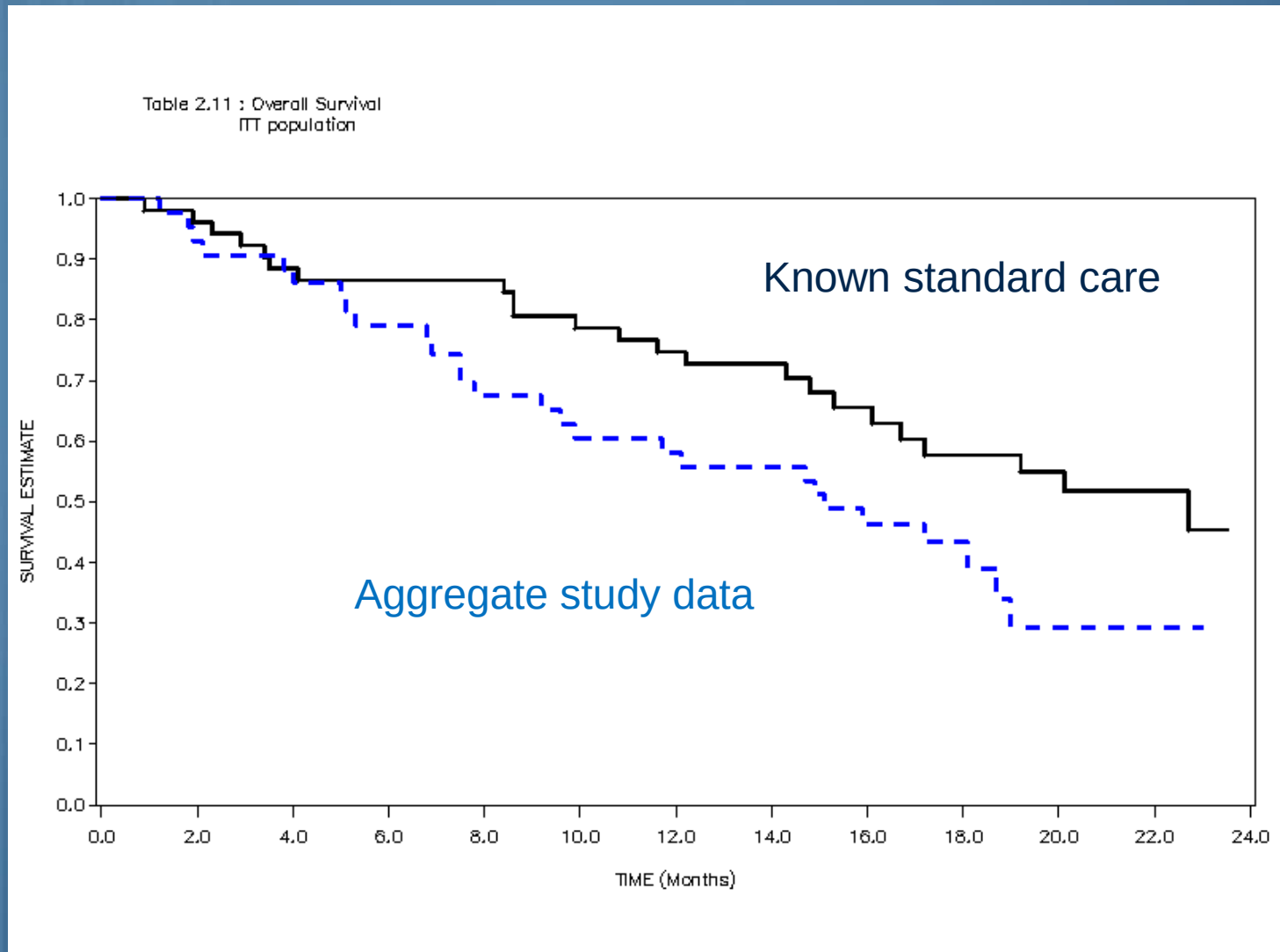
- ▶ **Examples of data that can unblind**
 - ▶ Aggregate data of survival time in oncology
 - ▶ Laboratory data on a by-patient basis

Unintentional unblinding 2/3

Table 2.11 : Overall Survival
ITT population



Unintentional unblinding 2/3



Unintentional unblinding 3/3

Listing of laboratory parameters (Lipids)

Centre	Patient	Visit	Cholesterol [mg/dl]	LDL [mg/dl]	HDL [mg/dl]
3028	2807	1	214	148	58 L
		2	218	154 H	52 L
		3	224	172 H	56 L
		4	211	153 H	46 L
		5	201	134	49 L
		6	193	137	48 L
		7	217	150 H	56 L
		8	252 H	164 H	57 L
3005	5018	1	287 H	219 H	34 L
		2	248 H	176 H	48 L
		3	221	148	42 L
		4	229	148	44 L
		5	203	103	38 L
		6	209	122	44 L
		7	201	112	45 L

Who needs access to what ?

▶ Who

- ▶ Clinical
- ▶ Data Management
- ▶ Statistics
- ▶ DMC/DSMB

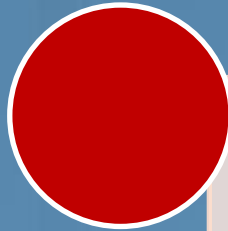
▶ To which data

- ▶ For what purpose ? (ongoing safety review, annual safety updates, monitoring, cleaning)

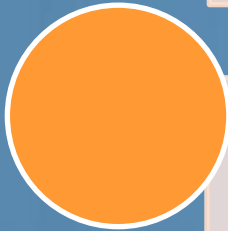
▶ How

- ▶ Access control
- ▶ Documentation/specifications

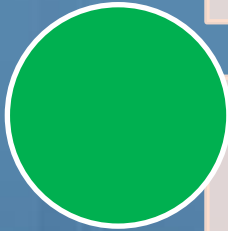
Conclusion



unintentional
unblinding



inadequate
hardcopy



accelerate
review

